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# Record of Decision

## Railroad Spurline:

Grand Canyon Airport to Grand Canyon Village

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EXCHANGING PAPER

Grand Canyon National Park  
Kaibab National Forest



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# **Record of Decision**

## **Final Environmental Impact Statement:**

**Grand Canyon Railway, Inc.**

**Passenger Rail Service,**

**Grand Canyon Airport to Maswik**

**Transportation Area, Grand Canyon Village**

**USDI Park Service, Grand Canyon National Park**

**USDA Forest Service, Kaibab National Forest**

**Coconino County, Arizona**





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## ***Introduction***

This Record of Decision approves the construction and operation of a railroad spurline from Grand Canyon Airport in Tusayan to Maswik Transportation Area in Grand Canyon National Park. The alternatives considered and the rationale for selecting the preferred alternative are described in this Record of Decision.

Grand Canyon Railway, Inc., based in Williams, Arizona, currently provides passenger rail service, using historic railroad equipment, from Williams to the train depot in Grand Canyon Village, Grand Canyon National Park. Approval of the operation, initiated in 1989, was based on two primary considerations: the historic nature of the train service, and its potential for helping to reduce vehicle congestion in Grand Canyon Village.

Shortly after reinstatement of the Williams to Grand Canyon line, Grand Canyon Railway proposed an additional passenger rail service, also using historic trains, between Grand Canyon Airport and Grand Canyon Village. The proposal involves construction of new railroad track heading west from Grand Canyon Airport, linking with the existing line from Williams at Apex Siding. With parking and depot facilities at the Airport, the rail service would serve as a transportation hub for Grand Canyon National Park visitors arriving by air, and for those traveling by automobile along State Highway 64.

The proposed railroad spurline involves lands within the Grand Canyon National Park and Kaibab National Forest. The Park Service and Forest Service, as joint lead agencies, decided the preparation of an environmental impact statement (EIS) was warranted. Because the proposal has implications to Grand Canyon Airport, the Arizona Department of Transportation, Aeronautics Division, participated as a cooperating agency. A notice to prepare an EIS was published in the Federal Register in June 1989. The EIS analyzes six alternatives, including four alternative railroad alignments, one non-rail alternative and the no action alternative. The alternatives were analyzed for impacts on biotic communities, sensitive species, air quality, natural quiet, scenic quality, cultural resources, multiple uses, socioeconomic, visitor experience, transportation and traffic, and for consistency with National Park and National Forest objectives.

## ***Decision and Rationale***

It is our decision to implement Alternative A, the proposed action, which provides for the construction of 5.4 miles of new railway line in the Kaibab National Forest, incorporating 1.1 miles of a historic rail alignment, and use of existing rail lines in the Kaibab National Forest and Grand Canyon National Park. The selected alternative features a turn-around loop at the Airport end, two depots, phased construction of up to 75 acres of parking, construction of a maintenance road, and storage

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tanks for fuel, water and wastewater. Up to 8 trains per day will operate between the Airport and Maswik Transportation Area. Interpretive activities and visitor orientation to the National Park and National Forest will be offered along the 17 mile, 55 minute trip, and at the train depot to be constructed on National Forest lands.

The proposed railroad spurline is not the only solution to the traffic problems in Grand Canyon Village. However, based on the analysis in the EIS, the proposal has the potential to significantly reduce automobile traffic congestion in the Park. The analysis in the EIS also demonstrates that no unacceptable environmental effects will occur from construction and operation of the railroad spurline.

Specific reasons and factors which were considered in selecting Alternative A are listed below. No single factor determined the decision. Based on consideration of these factors, Alternative A best meets the purpose and need, "to provide a transportation hub at Grand Canyon Airport where automobile passengers can leave their cars and utilize mass transportation into Grand Canyon National Park."

***Potential to reduce traffic congestion.*** The need for measures to alleviate traffic congestion in Grand Canyon Village has been consistently identified in Park Service planning documents. The 1977 Development Concept Plan for Grand Canyon Village established a long-range objective to eventually eliminate the use of private vehicles from the historic district and Rim area during the peak use season.

The analysis in the EIS indicates that the spurline will serve as a partial solution to the traffic and transportation problems in Grand Canyon National Park. During the proposed eight month operating season, the railroad spurline has the potential to accommodate 705,600 passengers. This equates to 208,250 cars, or about 25 percent of the cars entering the Park through the south entrance.

***Visibility of the operation from Highway 64.*** Under Alternative A, a portion of the turn-around loop and one of the two railroad depots are designed to provide visibility of the operation to travelers along Highway 64. Visibility from Highway 64 offers a distinct marketing advantage and is considered integral to the success of the project. Automobile passengers are more likely to be diverted from their cars if they are able to see the train. Thus, visibility of the operation will increase train ridership which will in turn reduce the number of vehicles entering the Park.

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In the construction phase, care will be taken to preserve the existing characteristic landscape adjacent to Highway 64 to the extent practical. This will be accomplished primarily by keeping vegetation and tree clearing to a minimum.

***Proximity to Grand Canyon Airport.*** The location of the turn-around loop, parking and depot facilities in Alternative A is advantageous for several reasons. First, it allows the railroad to attract Park visitors arriving by air. This is an essential market for the economic viability of the railroad spurline. Second, it allows Grand Canyon Railway to incorporate existing infrastructure to the extent practical (access roads, utility systems, etc.), thus reducing environmental impacts.

***Future transportation options.*** Approval of the railroad spurline does not preclude consideration of other transportation proposals. Other private entities may propose projects to provide transportation services to Grand Canyon National Park. If a proposal is technically and economically feasible and is consistent with the management policies and guidelines of the land managing agencies, the proposal may be analyzed under the National Environmental Policy Act.

***Information and interpretive opportunities.*** Interpretation and orientation materials and services will be available to passengers of the railroad spurline, on both the train and in the depots. Additionally, Grand Canyon Railway is planning to use restored locomotives and passenger cars to be consistent with the historical context of the Williams to Grand Canyon line. The information and interpretive opportunities, and historic context of the spurline, will contribute to and enhance the visitor experience.

***Private venture.*** The project will not be subsidized by the federal government. All direct costs related to construction, operation, and maintenance of the system will be borne by Grand Canyon Railway. Grand Canyon Railway will be assessed an annual fee by the Forest Service and Park Service for the use of federal lands.

***Consistent with Federal and State planning documents.*** The railroad spurline is consistent with the Kaibab National Forest Plan, the 1977 Development Concept Plan for Grand Canyon Village and the Grand Canyon Airport Master Plan. The spurline is also incorporated in all of the alternatives considered in the ongoing planning process for the new General Management Plan for Grand Canyon National Park.

***Future Airport uses.*** The Selected Alternative, with the turn-around loop, parking and depot facilities adjacent to the Airport,



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consolidates transportation uses and incorporates the use of common infrastructure. However, the only Airport lands directly impacted by the railroad spurline are those at the south end of the Airport property. The Selected Alternative does not interfere and preclude the construction of airport facilities identified in the 1991 Grand Canyon Airport Master Plan.

With the exception of the placement of railroad track within sight of Highway 64, all practical means have been employed to avoid and minimize environmental harm. Care will be taken to preserve the existing characteristic landscape along the highway corridor, although some visibility of the spurline operation is considered essential to attract Park visitors traveling along Highway 64.

Mitigation measures specific to each resource issue are listed in Chapter 2, Section D, of the EIS. These measures will be incorporated as terms and conditions, and design features of construction plans, special use permits and other instruments that authorize the construction and operation of the railroad spurline. Compliance with mitigation measures will be gained through project administration and monitoring, performance bonds required by the special use permit, and various sanctions provided under applicable laws and regulations.

## ***Public Involvement and Scoping***

Extensive scoping and public involvement has occurred for the railroad spurline. Numerous meetings, both formal and informal, were held prior to the preparation of the draft and final EIS, including several public meetings held pursuant to the CEQ regulations. Public involvement included formal scoping meetings held in Tusayan and Flagstaff, widespread media coverage, and distribution of scoping letters and over 250 copies of the draft EIS to federal, state and local government agencies, Native American Tribes, news media, organizations, libraries and individuals.

Comments received throughout the scoping and analysis process were considered in the EIS. A description of scoping and coordination efforts is contained in Chapter 5 of the EIS. Issues, identified from scoping, and analyzed in detail in the EIS, are described in Chapter 1, Section E.

The draft EIS was issued in July 1992. Based on a number of requests, the comment period on the draft EIS was extended until November 14, 1992. Additional comments and information were accepted and considered in this decision up until the last practical time (May 1993) before finalizing the EIS. Fifty-one letters, and numerous "form" letters, were received on the draft EIS. Each

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comment and an individual agency response are contained in Appendix A of the final EIS.

The EIS was revised to reflect the comments received on the draft EIS. Important changes include:

***Expanded analysis and discussion of economic impacts.*** Numerous comments expressed concern about the potential economic impact of the railroad spurline on the business community in Tusayan. Based on these comments, the analysis and discussion of economic impacts has been expanded in the final EIS.

The federal agencies secured the services of the Arizona Hospitality Research and Resource Center at Northern Arizona University to assess the potential economic impact of the proposed spurline on the sale of goods and services in the community of Tusayan. Additionally, several businesses in Tusayan had the firm of Coopers and Lybrand assess the potential economic impacts of the spurline. The results of both analyses are presented in Chapter 4 of the EIS, and the NAU report and Coopers and Lybrand study are included in their entirety as Appendix D and F in the EIS. Neither study takes into account the effects of projected increased visitation to the Park.

The Coopers and Lybrand study projects an annual loss of \$13,179,771, or 23 percent of the total estimated gross revenue of Tusayan used in the study (\$56 million). This annual loss figure is based on the maximum potential ridership of the train of 1,051,200 people (eight trains per day for 12 months at full capacity).

The NAU study indicates a range of potential annual revenue loss to the businesses of Tusayan of \$606,860 at the 200,000 ridership level to \$3,189,656 at the 1,051,200 ridership level. This potential annual loss represents 2.8 percent to 14.7 percent of the total annual gross revenue of Tusayan used in the NAU study (\$21 million).

While there is obvious wide disparity in the results of the two economic analyses, there is no dispute that the railroad spurline will have some impact to the businesses of Tusayan. However, because the train will primarily provide transportation services, passengers may still elect to purchase goods and services in Tusayan either before or after their train trip. The community of Tusayan will continue to serve as the principle provider for food, retail goods and entertainment services for Park visitors.

***Expanded discussion of visual impacts.*** Several comments expressed concern about the inadequacy of the visual resource

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analysis in the draft EIS, particularly as it relates to the corridor along Highway 64. The final EIS includes an expanded discussion of visual impacts, including visual simulations of the proposed railroad spurline from viewpoints on Highway 64 and at the south end of the Airport.

The analysis in the EIS indicates that there will be some degree of visual impact, especially to travelers along Highway 64. However, some visibility is essential to the overall success of the project. Visual impacts can be reduced to acceptable levels by careful placement of the track alignment along the highway corridor. This will keep vegetation and tree clearing to a minimum.

***Cumulative effects.*** The final EIS includes an expanded analysis and discussion of cumulative effects, including impacts from the proposed Tusayan land exchange.

***Parking lot design.*** The parking lot configuration for the railroad alternatives is more fully developed in the final EIS. A conceptual plan for the parking and depot facilities is included as Figure 3 in the EIS. This plan allows for a more accurate assessment of environmental impacts from the construction of these facilities.

***Mitigation measures.*** The final EIS includes a list of mitigation measures specific to each resource issue in Chapter 2, Section D.

Several comments expressed support for the preparation of a "comprehensive regional plan" that would analyze various project proposals in the Grand Canyon area, such as the railroad spurline and Tusayan land exchange. While these proposals have implications to and for each other, it is neither desirable or feasible to combine these proposals for analysis in a comprehensive regional plan. The proposed land exchange and spurline are specific proposals that require the detailed analysis of site-specific impacts to meet the requirements of the National Environmental Policy Act. The environmental issues requiring analysis, the range of alternatives and the geographical boundaries of the analysis are well-defined for these specific proposals. Analyses and decisions about these proposals can move forward independently, with proper consideration of the interrelationship of the proposals under cumulative effects.

Several letters also suggested moving the parking and depot facilities north, adjacent to the community of Tusayan to reduce potential economic impacts to businesses. The location of the spurline and related facilities is largely fixed, based on topography and railroad



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engineering constraints, and the need to be in close proximity to the Airport. Visitors arriving by air and by automobile are both considered to be essential markets for the viability of the railroad spurline. Furthermore, the development of other transportation systems by the community of Tusayan is not precluded by construction of the railroad spurline.

## ***Alternatives Considered***

Six alternatives were considered in detail. Four alternatives involve various railroad alignments and configurations of the parking and depot facilities. One alternative features the use of buses as the primary mass-transit vehicle, and one alternative is no action.

Alternatives eliminated from detailed study include an alignment along the west side of the Airport, a transportation hub north of the community of Tusayan and south of the Moqui Lodge, other forms of mass-transit, the Maswik Loop, and other commercial development for the land on which the railroad spurline and parking lot would be located.

### **Detailed Alternatives**

***Alternative A***, the proposed action and selected alternative, would require the construction of 5.4 miles of new railway line on the Kaibab National Forest. This alternative provides for the construction of two depots, phased construction of up to 75 acres of parking, and the construction of a maintenance road and storage tanks for fuel, water and wastewater. This alignment crosses the Airport property near the south end of the Airport. A portion of the turn-around loop would be visible from Highway 64.

***Alternative B*** is similar to Alternative A, but differs primarily in alignment of the newly constructed segment of track. Much of this alignment would run within the boundary of the Airport property. A portion of the turn-around loop would be visible from Highway 64.

***Alternative C*** is similar in its alignment to Alternative B. Much of the newly constructed track would run within the boundary of the Airport property. The turn-around loop would not be visible from Highway 64 in Alternative C.

***Alternative D*** features an alignment that extends north of the Airport and runs along Coconino Wash. The turn-around loop would not be visible from Highway 64 in Alternative D. Only one train depot would be constructed in this alternative.

***Alternative E*** is a non-rail alternative. A shuttle bus system would operate in conjunction with parking and depot facilities located near the Airport.

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*Alternative F* is the no action alternative. Transportation into Grand Canyon Village would continue under current conditions.

### **Eliminated Alternatives**

A railroad alignment along the west side of the Airport was initially considered. This alignment was longer, more costly and impacted an area with high wildlife values.

Many comments received on the draft EIS suggested that a better location for the transportation hub would be on National Forest lands south of the Moqui Lodge and north of Tusayan. This location is not conducive to attracting both Airport passengers and Highway 64 travelers. The suggested location also has numerous engineering problems which are cost prohibitive.

A separate rail system was considered, but eliminated because of substantially greater environmental impacts associated with the development of an entirely new transportation corridor.

Construction of a wye loop in the vicinity of Maswik was considered initially, but eliminated because of the loss of vegetation that would be required to construct the loop. If this operational feature proves to be necessary in the future, it will be analyzed in a separate environmental analysis.

Other commercial development of the involved National Forest lands was eliminated from detailed consideration because these alternative land uses fail to meet the purpose and need of relieving traffic congestion in Grand Canyon National Park.

### ***Findings Required by Other Laws***

The railroad spurline, parking lot, depots and related facilities are located in Management Area 8 of the Kaibab Forest Plan (KFP). The project is consistent with the goals, objectives, and management direction in the Forest Plan, which calls for the "integration and coordination for transportation management in land and resource planning with other transportation authorities", "provide transportation facilities that support resource management and protection and safe public access" and the "efficient management of resources that responds to needs for...rights-of-ways" (KFP, pg. 105).

The railroad spurline, serving as another means of mass transit for Park visitors, is consistent with the 1919 establishing legislation for Grand Canyon National Park, "Whenever consistent with the primary purposes of Grand Canyon National Park, section 79 and 522



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of this title and subsequent Acts shall be applicable to the lands included within the Park. The Secretary of the Interior may, in his discretion and upon such conditions as he may deem proper, grant easements or rights-of-way for railroads upon or across the Park" (16 USC 225).

Further National Park Service management direction encourages development of facilities and services outside the Park where feasible. If adequate facilities exist or can be feasibly developed by private enterprise to serve park visitor's needs for commercial services outside of park boundaries, such facilities will not be expanded or developed within parks (Management Policies 10:1, 2 and 3). Additionally, the National Park Service will work with other federal and state agencies, local and regional planning bodies, citizen groups, and others to promote public transit systems for park access and circulation, and to encourage use of public transportation wherever feasible (Management Policy 9:9).

The Federal Aviation Administration (FAA) authorizes the use of airport lands under Part 77 of FAA's guidelines, entitled "Objects Affecting Navigable Airspace". These regulations are intended to ensure an appropriate margin of safety for take-offs and landings around airports. FAA's review process includes the submission of and approval of a 7460-1, Notice of Intent to Construct. Discussions with Arizona Department of Transportation, Aeronautics Division, indicate that the spurline can be designed and constructed in the south end of the Airport property in accordance with FAA guidelines.

Implementation of the Selected Alternative may require a Section 404 permit from the US Army Corps of Engineers and an associated State Water Quality Certification from the Arizona Department of Environmental Quality.

Fifteen of 16 cultural resource sites located within the spurline corridor and parking area are potentially eligible for the National Register of Historic Places. Further testing is required on sites which cannot be avoided to determine their eligibility for the National Register. A cultural resource testing and mitigation plan is being developed and is subject to approval by the Kaibab National Forest and Arizona State Historic Preservation Office to comply with Section 106 of the National Historic Preservation Act.

Impacts to threatened, endangered and sensitive plants and animals are analyzed in the EIS. The analysis and biological evaluation (included as Appendix C) conclude that there will be "no effect" on the viability of the population of any species from the construction and operation of the railroad spurline.

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## ***Environmentally Preferred Alternative***

Alternative A, the Selected Alternative, is the environmentally preferred alternative because it has the greatest potential to reduce traffic congestion in the Park.

Alternative E, the bus system alternative, would require fewer acres of clearing than the railroad alternatives (up to 75 acres of parking would be required in Alternative E, in comparison to an estimated 115 acres of clearing for parking and track construction in Alternatives A through D). Although, no private interest has been expressed to provide the bus system envisioned in Alternative E, implementation of the Selected Alternative does not preclude development of a separate or associated bus shuttle system.

Alternative F, no action, is not environmentally preferred because it fails to address the problem of transportation congestion in Grand Canyon National Park. Under Alternative F, transportation problems would intensify as visitation increases.

## ***Implementation Date***

This project will not be implemented sooner than 30 days following publication of the Notice of Availability of the EIS in the Federal Register. Implementation means actually undertaking the ground disturbing actions described in the EIS. Field project preparation work may proceed (survey, engineering, construction planning, etc.).

## ***Forest Service Appeal Rights***

This decision, as it affects National Forest System lands, is subject to appeal in accordance with 36 CFR 217. A notice of appeal must be in writing and clearly state that it is a Notice of Appeal being filed pursuant to 36 CFR 217. Appeals must be filed with the Regional Forester, Southwestern Region, 517 Gold Avenue SW, Albuquerque, New Mexico 87102-0084 within 45 days of legal notice of this decision in the Arizona Daily Sun.

## ***National Park Service Approval***

The National Park Service (NPS) does not have a formal appeal process and normally does not execute a Record of Decision until the 30 day no-action period has expired following acceptance of final environmental impact statements by the Environmental Protection Agency and their filing of a Notice of Availability in the Federal Register. In this case, to be consistent with Forest Service procedures, the NPS is executing the Record of Decision, incorporated in this final environmental impact statement, with the understanding that the NPS will not undertake any implementation actions pending expiration of the 30 day no-action period and contingent on any appeals received pertaining to National Forest System lands.

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***Information Contact  
Persons***

For additional information concerning the decision affecting National Forest lands or the Forest Service appeal process, contact Dennis Lund or Tom Gillett, Kaibab National Forest, 800 South Sixth Street, Williams, Arizona 86046, (602) 635-2681.

For information concerning the decision affecting National Park lands, contact the Superintendent, Grand Canyon National Park, PO Box 129, Grand Canyon, Arizona 86023, (602) 638-7701.

*William M. Lannan*  
WILLIAM M. LANNAN

*11-30-93*  
Date

Forest Supervisor, Kaibab National Forest  
USDA Forest Service

*Stanley T. Albright*  
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STANLEY T. ALBRIGHT  
Regional Director, Western Region  
USDI National Park Service

*12-2-93*  
Date



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